

What is Claim d is:

1. An antistatic polymer composition comprising

a) a polymer substrate selected from the group consisting of the polyolefins, polyesters, polyamides and polylactic acids and

b) a combination of

i) at least one permanent antistatic additive selected from the group consisting of the polyetheresteramides and

ii) at least one migratory antistatic additive selected from the group consisting of the alkylsulfonic acid salts, the alkyl diethanolamines and the alkyl diethanolamides.

2. A composition according to claim 1 in which the polyetheresteramides are aliphatic polyetheresteramides.

3. A composition according to claim 1 in which the polyetheresteramides are aromatic polyetheresteramides.

4. A composition according to claim 2 wherein the polyetheresteramide consists essentially of residues derived from (1) a polyamide oligomer having carboxylic end groups and having a number average molecular weight of from about 200 to about 15,000 and (2) a polyoxyalkylene glycol having a number average molecular weight of from about 200 to about 6,000.

5. A composition according to claim 4 where the carboxylic group is derived from adipic, sebacic, terephthalic or isophthalic acids or 3-sulfoisophthalic acid alkali metal and the

polyoxyalkylene glycol is polyethylene glycol.

6. A composition according to claim 3 wherein the polyetheresteramide consists essentially of residues derived from (1) a polyamide oligomer having carboxylic end groups and having a number average molecular weight of from about 200 to about 15,000 and (2) a polyoxyalkylated bisphenol compound having a number average molecular weight of from about 200 to about 6,000.

7. A composition according to claim 6 where the carboxylic group is derived from adipic, sebacic, terephthalic or isophthalic acids or 3-sulfoisophthalic acid alkali metal and wherein the polyoxyalkylated bisphenol compound is a polyoxyalkylated alkylidene bisphenol.

8. A composition according to claim 6 wherein the polyoxyalkylated bisphenol is the ethylene oxide adduct of bisphenol A.

9. A composition according to claim 1 where the migratory antistatic additives are selected from the group consisting of the alkylsulfonic acid salts.

10. A composition according to claim 9 where the alkylsulfonic acid salts are straight or branched chain C₂-C₂₂alkylsulfonic acid salts.

11. A composition according to claim 9 where the alkylsulfonic acid salts are straight or branched chain C₁₀-C₁₈alkylsulfonic acid salts.

12. A composition according to claim 9 where the alkylsulfonic acid salts comprise a counterion selected from the group consisting of the alkali metal cations, alkaline earth metal cations and zinc cation.

13. A composition according to claim 9 where the alkylsulfonic acid salts comprise a counterion selected from the group consisting of the cations of Li, Na, K, Ca, Mg and Zn.
14. A composition according to claim 9 where the alkylsulfonic acid salts are a mixture of C₁₀-C₁₈alkylsulfonic acid sodium salts, CAS # 68037-49-0.
15. A composition according to claim 1 where the migratory antistatic additives are selected from the group consisting of the alkyl diethanolamines and the alkyl diethanolamides.
16. A composition according to claim 15 where alkyl is straight or branched chain C₂-C₂₂alkyl.
17. A composition according to claim 15 where alkyl is straight or branched chain C₁₀-C₁₈ alkyl.
18. A composition according to claim 15 where the alkyl diethanolamines and the alkyl diethanolamides are hydrogenated tallow bis(2-hydroxyethyl)amine, tridecyl bis(2-hydroxyethyl)amine, pentadecyl bis(2-hydroxyethyl)amine, lauryl bis(2-hydroxyethyl)amine, hydrogenated tallow bis(2-hydroxyethyl)amide, tridecyl bis(2-hydroxyethyl)amide, pentadecyl bis(2-hydroxyethyl)amide or lauryl bis(2-hydroxyethyl)amide.
19. A composition according to claim 15 where the migratory additive is lauryl bis(2-hydroxyethyl)amide, CAS# 120-40-1.

20. A composition according to claim 1 where the polymer substrate is polyethylene, polypropylene, polyethylene/polypropylene copolymer, polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthalate, polyamide 4, polyamide 6, polyamide 6,6, polyamide 6,10, polyamide 6,9, polyamide 6,12, polyamide 4,6, polyamide 12,12, polyamide 11, polyamide 12 and polylactic acid.

21. A composition according to claim 1 where the polyetheresteramides of component i) are present from about 0.5% to about 15% by weight, based on the weight of the polymer substrate.

22. A composition according to claim 1 where the polyetheresteramides of component i) are present from about 1% to about 10% by weight, based on the weight of the polymer substrate.

23. A composition according to claim 1 where the migratory additives of component ii) are present from about 0.05% to about 2% by weight, based on the weight of the polymer substrate.

24. A composition according to claim 1 where the migratory additives of component ii) are present from about 0.05% to about 1% by weight, based on the weight of the polymer substrate.

25. An antistatic additive mixture comprising

- i) at least one permanent antistatic additive selected from the group consisting of the polyetheresteramides and
- ii) at least one migratory antistatic additive selected from the group consisting of the alkylsulfonic acid salts, the alkyl diethanolamines and the alkyl diethanolamides.

26. A process for the preparation of antistatically finished polymers selected from the group consisting of polyolefins, polyesters, polyamides and polylactic acids,

which process comprises mixing an additive mixture comprising

i) at least one permanent antistatic additive selected from the group consisting of the polyetheresteramides and

ii) at least one migratory antistatic additive selected from the group consisting of the alkylsulfonic acid salts, the alkyl diethanolamines and the alkyl diethanolamides,

as such or in the form of its individual components and together with optional further additives with said polymers in calenders, mixers, kneaders or extruders.

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